

Ho et al.

S/N: 10/063,829

REMARKS

Claims 1-33 are pending in the present application. In the Office Action mailed October 19, 2004, the Examiner rejected claims 1-2, 4, 7-10, 12, 14-16, 18-19, 21, 23-24, and 26 under 35 U.S.C. §102(e) as being anticipated by Wang et al. (USP 6,535,821). The Examiner next rejected claims 3, 11, and 27 under 35 U.S.C. §103(a) as being unpatentable over Wang et al. in view of Dumoulin et al. (USP 6,584,337). Claims 13, 17, 20, 22, and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wang et al. in view of Lang et al. (USP 5,671,741).

Applicant appreciates the allowability of claims 30, 32, and 33.

In the Amendment/Response to the Office Action mailed May 12, 2004, Applicant requested that the Examiner provide an explanation as to the basis of the Examiner's conclusion that Wang et al. discloses that called for in claims 1-2, 4, 7-10, 12, 14-16, 18-19, 21, 23-24, and 26. Specifically, Applicant reminded the Examiner that the Examiner's Note 7.15 from MPEP §706.02(i) states that accompanying a statement such as "clearly anticipated" or "anticipated", must be "an explanation at the end of the paragraph." MPEP §706.02(i). As the Examiner had indicated that Wang et al. "clearly anticipated" the claimed invention, Applicant requested that the Examiner provide the explanation that the MPEP requires. Notwithstanding this request and the guidance of MPEP, the Examiner, again, in the Office Action mailed October 19, 2004 did not provide the explanation mandated by MPEP §706.02(i). Accordingly, Applicant requests an explanation as to the basis of the Examiner's rejection.

Additionally and notwithstanding the absence of any explanation as to a basis of rejecting claims 1-2, 4, 7-10, 12, 14-16, 18-19, 21, 23-24, and 26 under 35 U.S.C. §102(e), Applicant believes there are numerous distinctions between the claimed invention and Wang et al. Specifically, Wang et al. teaches a system and method of bolus chasing angiography with adaptive real-time computed tomography (CT). More particularly, Wang et al. teaches a system designed to drive a patient table "to chase the contrast bolus". Abstract, USP 6,535,821. Wang et al. teaches a table control unit that may be fed with control parameters to adaptively transport a patient table to chase the motion of a contrast bolus so as to synchronize bolus peak and imaging aperture to minimize discrepancies between a predicted bolus position and a measured bolus position. See Col. 11, lns. 62-67. The dynamic controlling of an imaging scan as taught by Wang et al. is limited to adaptively controlling a patient table to chase or otherwise track a contrast bolus having been injected into a scan subject.

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In contrast, the present invention, as defined by claim 1 includes the step of allowing modification of initial scan parameters while automatically moving a table and acquiring MR data. As such, the present invention differentiates table motion control data from scan parameters. While claim 1 is not so limited, one skilled in the art will readily recognize that adjusting or otherwise modifying scan parameters would include allowing changes to the number of sections imaged, section spacing, section scan locations, as well as acquisition plane. In contrast to scan parameters, Wang et al. only teaches adaptive control of the table to track a contrast bolus in a subject. As such, Applicant respectfully believes that which is called for in claim 1 is patentably distinct from that taught and/or suggested by the art of record.

Regarding the rejection of claim 10, Applicant respectfully refers the Examiner to remarks set forth above with respect to claim 1. In short, claim 10 calls for an MRI apparatus having a computer programmed to, in part, allow reception of user input during table translation and, as soon as received, modify translation in response thereto and allow reception of user input of scan parameters and, if so, modify MR data acquisition in response thereto. As set forth above, Wang et al. fails to teach or suggest a system that allows a user to modify scan parameters during an MR scan.

Similarly, with respect to claim 19, Wang et al. fails to teach or suggest a computer readable storage medium having stored thereon a computer program comprising instructions which, when executed by a computer, cause the computer to move a patient table through an MR scanner and simultaneously acquire MR data and allow user input in response thereto to manipulate at least one of patient table speed, direction, and scan parameters. Likewise, and referring to claim 23, Wang et al. fails to teach or suggest a method of identifying a tumor in a patient comprising the steps of placing a patient on a movable table, translating the movable table and acquiring MR data as a patient moves through a magnetic field, reconstruct MR images of patient anatomy that the movable table is translating, penalizing MR images and, if an area of interest is identified for further study, returning the movable table such that the area of interest is within the magnetic field in modifying the MR data acquisition parameters in real-time, and acquiring one of higher resolution MR data in different MR plane data to allow further analysis of the area of interest.

Claim 1 has been amended to correct an antecedent basis issue that remained in light of the previous amendment made to claim 1 in the Amendment filed July 28, 2004. Applicant has also amended claims 30-33. Claims 30-33 as previously presented did not properly incorporate the subject matter the Examiner had indicated allowable in the Office Action mailed May 12,

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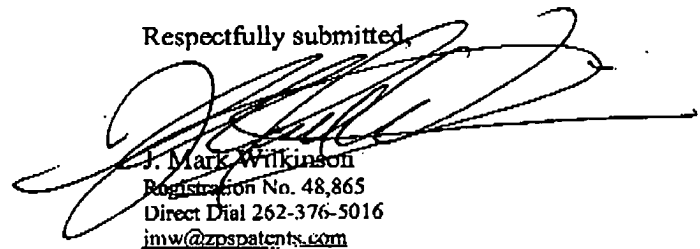
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2004. By these amendments, Applicant believes claims 30-33 are consistent with what the Examiner indicated as allowable in the May 12th Office Action.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1-33.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,



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